



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,017	12/05/2003	Nick Huffman	HFMN.001A	8816

20995 7590 06/28/2005

Knobbe Martens Olson & Bear LLP  
2040 Main Street  
Fourteenth Floor  
Irvine, CA 92614

EXAMINER
----------

HARVEY, DIONNE

ART UNIT	PAPER NUMBER
----------	--------------

2646

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/729,017

Applicant(s)

HUFFMAN, NICK

Examiner

Dionne N. Harvey

Art Unit

2643

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 and 17-19 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-16, 20 and 21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 6/3/2004.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Election/Restrictions*

1. This application contains claims directed to the following patentably distinct species of the claimed invention:

Group I, illustrated in figures 1A, 1B and 1C - claims 1-8 and 17

Group II, illustrated in figures 3A, 3B and 3C - claims 9-16,20 and 21

Group III, illustrated in figures 4 and 5 - claims 18 and 19

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, there is no generic claim.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Art Unit: 2643

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

During a telephone conversation with Greg Hermanson on June 24, 2005 a provisional election was made without traverse to prosecute the invention of Group II, claims 9-16,20 and 21.

Affirmation of this election must be made by applicant in replying to this Office action. Claims 4, 9-16 and 18-21 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. **Claims 9-16,20 and 21** are rejected under 35 U.S.C. 102b as being anticipated by **Wilke (US 5,710,395)**.

Art Unit: 2643

Regarding claim 9, **in figure 6**, Wilke teaches a speaker system, comprising: a substantially cylindrical primary enclosure **11** having a primary enclosure volume **5** and having an open end (***via open member 70***) and a closed end;

a speaker **60** for reproducing a full range of high frequency audio signals, mounted to a surface of the primary enclosure;

a front face of the speaker driver positioned external to the primary enclosure and a rear face of the speaker driver positioned internal to the primary enclosure;

Wilke teaches that member **91** operates to pass air out of the primary enclosure into the outside environment, since member **91** has a height dimension and cylindrical periphery, as shown in the figure **6**, member **91** is interpreted as reading on "a substantially cylindrical port section having open ends" and wherein the axis of the port **91** is coincident with an axis of the primary enclosure **11**;

Absent clear structural limitations drawn to the structure of the "transition region" of the claims, the Examiner interprets structure **70** as reading on "a transition section" having a first open end **75** coupled to the open end of the primary enclosure and a second open end **80** substantially opposite the first open end **75**, the second open end **80** coupled to one end of the port section **91**.

Regarding claim 10, Wilke teaches that the speaker driver **60** is mounted to the closed end of the primary enclosure, as broadly claimed.

Art Unit: 2643

Regarding claim 11, Wilke teaches that the speaker driver is mounted to the tubular portion of the enclosure, which reads on “a face” of the primary enclosure.

Regarding claim 12, in **figure 6**, Wilke teaches that a latitudinal axis of the speaker driver **60** is substantially perpendicular to the axis of the port section (*in a longitudinal direction*).

Regarding claim 13, Wilke teaches that the dimensions of the first open end **75** of the transition section *substantially match* dimensions of the open end of the primary enclosure, as broadly claimed.

Regarding claim 14, Wilke teaches that the dimensions of the second open **80** end of the transition section *substantially match* dimensions of the port section, as broadly claimed.

Regarding claim 15, in **column 8, lines 24-35**, Wilke teaches a speaker similar in construction to that of **figure 6**, wherein the speaker enclosure was made from a bottle enclosure.

Regarding claim 16, Wilke does not teach that additional apertures were provided in the bottle loudspeaker enclosure, thus being interpreted as using the bottle neck as the port section of the loudspeaker enclosure, as claimed.

Art Unit: 2643

Regarding claim 20, in **column 8, lines 24-35**, Wilke teaches a speaker system according to his earlier embodiments, but wherein a bottle enclosure is used in substitute, comprising: a bottle enclosure, which reads on “a substantially cylindrical primary enclosure”, Wilke teaches that the bottle has a volume of approximately 6 fluid ounces, thereby reading on “having [a] diameter of less than 30 cm” and a primary enclosure volume and having an open end and a closed end;

Wilke teaches that small speakers were mounted to the bottle enclosure, reading on “a speaker driver mounted to a surface of the primary enclosure”;

and since Wilke teaches that the bottle has a volume of 6 fluid ounce, Wilke thereby teaches that an axis of the speaker driver is mounted less than 7 cm above the closed end (*when the bottle is set in the upright position*);

The larger loudspeaker construction, which is shown in **figure 6**, teaches that a front face of the speaker driver is positioned external to the primary enclosure and a rear face of the speaker driver is positioned internal to the primary enclosure;

the bottle enclosure, thus having a substantially cylindrical port section and having open ends of less than 2.5 cm in diameter, and the axis of the port section being coincident with an axis of the primary enclosure;

and shown in **figure 6**, the speaker system includes a transition section having a first open end coupled to the open end of the primary enclosure and a second open end substantially opposite the first open end, the second open end coupled to one end of the port section.

Regarding claim 21, Wilke teaches the use of a speaker for reproducing a full range of high frequency audio signals, such speakers typically being quite small, e.g. with a total diaphragm diameter of less than 10 cm and even less than 5 cm, thus reading on "a diameter of the speaker driver is less than 3 cm". (***see supporting reference, cited below***).

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Goller (US Patent 6,320,972)** teaches that high range speakers are constructed having diameters of less than 3 cm.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dionne N Harvey whose telephone number is 703-305-1111. The examiner can normally be reached on 9-6:30 M-F and alternating Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sinh Tran can be reached on 703-305-7564. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For



Art Unit: 2643

more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

D. Harvey



**SUHAN NI**  
**PRIMARY EXAMINER**